

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Congxin LIANG et al.
Title: 4-SUBSTITUTED 7-AZA-INDOLIN-2-ONES AND THEIR USE AS
PROTEIN KINASE INHIBITORS
Prior Appl. No.: 09/741,737
Prior Appl. Filing Date: 12/21/2000
Examiner: Unassigned
Art Unit: Unassigned

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop PATENT APPLICATION
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 09/741,737, filed 12/21/2000. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the filing date of the application.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

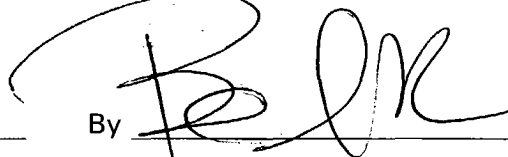
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date

7/21/03

By



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22428

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Beth A. Burrous
Attorney for Applicant
Registration No. 35,087

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: (use as many sheets as necessary)				Complete if Known	
				Prior Application Number	09/741,737
				Prior Appl. Filing Date	12/21/2000
				First Named Inventor	Congxin Liang
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Attorney Docket Number	038602-1617				

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	5,719,135	A	LONGO et al.	02-17-1998	
	A2	5,811,432		MARFAT et al.	09-22-1998	
	A3	5,916,891		ADAMS et al.	06-29-1999	
	A4	5,955, 592		ULLRICH et al.	09-21-1999	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A5	WO	87/04928	A1	MITSUI PETROCHEMICAL INDUSTRIES, LTD. et al.	08-27-1987		
	A6	WO	91/09598	A1	PFIZER INC.	07-11-1991		
	A7	WO	93/20078	A1	THE UPJOHN COMPANY	10-14-1993		
	A8	WO	96/16964	A1	PHARMACIA S.P.A.	06-06-1996		
	A9	WO	97/13771	A1	GLAXO GROUP LIMITED	04-17-1997		
	A10	WO	98/02437	A1	GLAXO GROUP LIMITED	01-22-1998		
	A11	WO	98/02438	A1	GLAXO GROUP LIMITED	01-22-1998		
	A12	WO	98/23613	A1	PFIZER INC.	06-04-1998		
	A13	WO	99/21859	A1	GLAXO GROUP LIMITED	05-06-1999		
	A14	WO	99/37622	A1	EISAI CO., LTD.	07-29-1999		

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NON PATENT LITERATURE DOCUMENTS				
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	A15	AKBASAK et al., "Oncogenes: cause or consequence in the development of glial tumors," <u>Journal of the Neurological Sciences</u> , 1992, pp. 119-133, Vol. 111, Elsevier Science Publishers B.V.		
	A16	ARTEAGA et al., "Blockade of the Type I Somatomedin Receptor Inhibits Growth of Human Breast Cancer Cells in Athymic Mice," <u>Journal of Clinical Investigation</u> , November 1989, pp. 1418-1423, Vol. 84, The American Society for Clinical Investigation, Inc.		
	A17	BASERGA, "Oncogenes and the Strategy of Growth Factors," <u>Cell Minireview</u> , December 19, 1994, pp. 927-930, Vol. 79, Cell Press		
	A18	BASERGA, "The Insulin-like Growth Factor I Receptor: A Key to Tumor Growth?" <u>Cancer Research</u> , January 15, 1995, pp. 249-252, Vol. 55		
	A19	BOLEN et al., "The Src family of tyrosine protein kinases in hemopoietic signal transduction," <u>The FASEB Journal</u> , December 1992, pp. 3403-3409, Vol. 6, Bristol-Myers Squibb		
	A20	BROTT et al., "MEK2 is a Kinase Related to MEK1 and is Differentially Expressed in Murine Tissues," <u>Cell Growth & Differentiation</u> , November 1993, pp. 921-929, Vol. 4, American Association of Cancer Research		
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	A22	CANCE et al., "Novel Protein Kinases Expressed in Human Breast Cancer," <u>International Journal of Cancer</u> , 1993, pp. 571-577, Vol. 54, Wiley-Liss, Inc.		
	A23	CLEAVELAND et al., "A Microtiter-Based Assay for the Detection of Protein Tyrosine Kinase Activity," <u>Analytical Biochemistry</u> , 1990, pp. 249-253, Vol. 190, Academic Press, Inc.		
	A24	COPPOLA, D. et al., "A Functional Insulin-Like Growth Factor I Receptor is Required for the Mitogenic and Transforming Activities of the Epidermal Growth Factor Receptor," <u>Molecular and Cellular Biology</u> , July 1994, pp. 4588-4595, Vol. 14, No. 7, American Society for Microbiology		
	A25	DAMASIO, "Alzheimer's disease and related dementias," <u>Cecil Textbook of Medicine</u> , 20 th Edition, 1996, pp. 1992-1996, Vol. 2		
	A26	DAVIS et al., Chapter 47, "Animal Cells: Cultivation, Growth Regulation, Transformation," <u>Microbiology 4th Ed.</u> , 1990, pp. 838-841, © J. B. Lippincott Company		

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	A27	DICKSON et al., "Tyrosine kinase receptor -- nuclear protooncogene interactions in breast cancer," <u>Cancer Treatment Research</u> , 1992, pp. 249-273, Vol. 61, 1991 Kluwer Academic Publishers, Boston		
	A28	DONATO et al., "Tumor Necrosis Factor Regulates Tyrosine Phosphorylation on Epidermal Growth Factor Receptors in A431 Carcinoma Cells: Evidence for a Distinct Mechanism," <u>Cell Growth and Differentiation</u> , May 1992, pp. 259-268, Vol. 3		
	A29	FARLEY et al., "Development of Solid-Phase Enzyme-Linked Immunosorbent Assays for the Determination of Epidermal Growth Factor Receptor and pp60 ^{c-src} Tyrosine Protein Kinase Activity," <u>Analytical Biochemistry</u> , 1992, pp. 151-157, Vol. 203, Academic Press, Inc.		
	A30	FLOEGE et al., "Factors involved in the regulation of mesangial cell proliferation <i>in vitro</i> and <i>in vivo</i> ," <u>Kidney International</u> , 1993, pp. S-47-S-54, Vol. 43, Suppl. 39, International Society of Nephrology		
	A31	GOLDRING et al., "Cytokines and Cell Growth Control," <u>Critical Reviews in Eukaryotic Gene Expression</u> , 1991, pp. 301-326, Vol. 1, No. 4		
	A32	HANSEN et al., "Application of two-dimensional gel analysis to identification and characterization of tyrosine phosphorylated substrates for growth factor receptors," <u>Electrophoresis</u> , 1993, pp. 112-126, Vol. 14, VCH Verlagsgesellschaft mbH, D-6940 Weinheim, 1993		
	A33	KATAGIRI et al., "Tyrosine-Phosphorylation of Tubulin during Monocytic Differentiation of HL-60 Cells," <u>The Journal of Immunology</u> , January 15, 1993, pp. 585-593, Vol. 150, No. 2, The American Association of Immunologists		
	A34	KORC et al., "Overexpression of the Epidermal Growth Factor Receptor in Human Pancreatic Cancer is Associated with Concomitant Increases in the Levels of Epidermal Growth Factor and Transforming Growth Factor Alpha," <u>Journal of Clinical Investigation</u> , October 1992, pp. 1352-1360, Vol. 90, The American Society for Clinical Investigation, Inc.		
	A35	LAYZER, "Degenerative diseases of the nervous system," <u>Cecil Textbook of Medicine</u> , 20 th Edition, 1996, pp. 2050-2057, Vol. 2		
	A36	LÁZARO et al., "Description of an Enzyme-Linked Immunosorbent Assay for the Detection of Protein Tyrosine Kinase," <u>Biochemistry</u> , 1991, pp. 257-261, Vol. 192, Academic Press, Inc.		
	A37	LEE et al., "Intracellular Retention of Membrane-anchored v-sis Protein Abrogates Autocrine Signal Transduction," <u>The Journal of Cell Biology</u> , September 1992, pp. 1057-1070, Vol. 118, The Rockefeller University Press		

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	A38	MACAULEY et al., "Autocrine Function for Insulin-like Growth Factor I in Human Small Cell Lung Cancer Cell Lines and Fresh Tumor Cells," <u>Cancer Research</u> , April 15, 1990, pp. 2511-2517, Vol. 50		
	A39	PERALDI et al., "Dephosphorylation of human insulin-like growth factor I (IGF-I) receptors by membrane-associated tyrosine phosphatases," <u>Biochem. J.</u> , 1992, pp. 71-78, Vol. 285		
	A40	PLOWMAN et al., "Receptor Tyrosine Kinases as Targets for Drug Intervention," <u>DN&P</u> , August 1994, pp. 334-339, Vol. 7, No. 6		
	A41	SANDBERT-NORDQVIST et al., "Characterization of Insulin-like Growth Factor 1 in Human Primary Brain Tumors," <u>Cancer Research</u> , June 1, 1993, pp. 2475-2478, Vol. 53		
	A42	SCHRAAG et al., "Standardization of an Enzyme-Linked Immunosorbent Assay for the Determination of Protein Tyrosine Kinase Activity," <u>Analytical Biochemistry</u> , 1993, pp. 233-239, Vol. 211, Academic Press, Inc.		
	A43	SIMONE, "Oncology: Introduction," <u>Cecil Textbook of Medicine</u> , 20 th Edition, 1996, pp. 1004-1010, Vol. 1		
	A44	SLAMON et al., "Studies of the HER-2/ <i>neu</i> Proto-oncogene in Human Breast and Ovarian Cancer," <u>Science Reports</u> , May 12, 1989, pp. 707-712, Vol. 244, American Association for the Advancement of Science		
	A45	TORP et al., "Expression of the epidermal growth factor receptor gene in human brain metastases," <u>APMIS</u> , 1992, pp. 713-719, Vol. 100, The Institute of Cancer Research		
	A46	TRAXLER et al., "Review: Oncologic, Endocrine & Metabolic Protein Tyrosine Kinase inhibitors in Cancer Treatment," <u>Exp. Opin. Ther. Patents</u> , 1997, pp. 571-588, Vol. 7, No. 6		
	A47	TUZI et al., "Expression of growth factor receptors in human brain tumours," <u>British Journal of Cancer</u> , 1993, pp. 227-233, Vol. 63		

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